PUBLIC NOTICE

US Army Corps
of Engineers
Omaha District

Application No:	199980165
Applicant:	FF Development LP
Waterway:	7-11 Ditch
Issue Date:	June 29, 1999
Expiration Date:	July 29, 1999

REPLY TO:
Tri-Lakes Project Office
9307 Colorado State Hwy. 121
Littleton, CO 80123-6901
FAX (303) 979-0602

30 DAY NOTICE

JOINT PUBLIC NOTICE
FOR PERMIT APPLICATION SUBMITTED TO
U.S. ARMY CORPS OF ENGINEERS
AND
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

The District Engineer, U. S. Army Engineer District, Omaha, Nebraska is evaluating a Department of the Army permit application from **FF Development LP., 5670 Greenwood Plaza Blvd., Suite 400, Englewood, Colorado, 80110.** Permits are issued under Section 404 of the Clean Water Act which regulates the discharge of dredged or fill material in the nation's waters.

FF Development is requesting authorization to perform channel improvements to the 7-11 Ditch. This project is located in Section 31, Township 5 South, Range 68 West, Arapahoe County, Colorado.

The proposed channel improvements will use varying slope grades of the channel sides and drop structures to create a meandering low flow channel within the constraints of the existing easement. They are proposed to occur in an existing channel along the southern boundary of the Fairmark Subdivision (Figure 1). The Ditch is a tributary of the South Platte River that flows into Lake 2, which occurs within the historical flood plain of the South Platte River.

The tributary historically flowed further to the south. As part of its ongoing mining activities and reclamation plan, Kiewit Western moved the channel to the north in its present alignment. As currently constructed, the channel does not have the capacity to remove the Fairmark Subdivision from the 100-year flood plain.

The proposed channel improvements include a V shaped trickle channel with ungrouted type VL riprap (average rock diameter 6 inches to 9 inches). The slopes on the trickle channel vary from 7:1 to 3:1 horizontal to vertical. The riprap extends and it is exposed on the main bank of the channel section for approximately 8 feet horizontally (Figure 2) and approximately 8 horizontal feet is to be installed in the trickle channel to prevent any main channel bank erosion. The riprap located in the trickle channel is to be buried by approximately 0.5 to 1.0 feet of soil to key in the toe. The alignment of the trickle channel is designed to provide sinuosity of the flow for further energy dissipation for minor flows. The reach of the channel has five 3-foot high vertical drop structures (Figures 2 and 4). The purpose of the drop structures is to flatten the slope of the invert of the channel and to dissipate the energy from the

intermediate flows. Each drop structure consists of a structural wall, grouted riprap upstream of the wall, and stilling basin downstream of the wall.

The proposed project will address the immediate and, eventually, the long-term drainage and flood hazard needs of the area. In the near term, channel improvements are needed to remove the adjacent parcel to the north of the channel from the jurisdictional 100-year flood plain. Ultimately, the channel will need to have the capacity to meet drainage and flood hazard requirements for adjoining future land uses to the south.

Additionally, the improvements need to meet the following criteria:

*The immediate channel alignment must occur within the easement granted to Littleton by the District and FF Development LLP, which is 90 feet wide.

*The ultimate channel design will need to be determined by the inflow flood generated from the 7/11 Ditch and ultimate land use within the watershed.

The ultimate channel will also be designed and constructed to provide wildlife habitat and water quality benefits and will be compatible with plans for integration with adjoining South Platte Park.

Future Channel Improvements

In 5 to 10 years the immediate channel will be replaced by a larger channel that will meet the drainage and flood control requirements of all remaining land in the watershed tributary to the channel (Figure 5). The future channel will be larger than the proposed immediate channel because it will need to convey runoff and flows greater than those that will occur with the development of the Fairmark Subdivision. The exact future channel dimensions and configuration will be determined by the inflow flood generated from the 7/11 Ditch from the west and ultimate land use.

The future channel invert could be as wide as 100 feet (probable maximum flood sizing) or substantially less for a channel sized for a 100-year flood event. Applicant requests approval to construct the future channel up to the PMF size. A PMF channel would provide a 100-foot wide bottom with a 25-foot wide meandering low flow channel that should provide a supportive hydrologic regime for wetland development. The outside bends of the meanders will be protected to maintain a meandering channel. A total of four-drop structures will be needed to control relocation and channel erosion.

The channel bottom would be planted with riparian shrubs and the banks of the low flow channel would be seeded and/or planted with herbaceous wetland vegetation. Vegetation from the existing channel would be salvaged and used to revegetate the future channel as feasible. Pools will be created to help maintain water quality and wildlife habitat. The current channel is not vegetated and is eroding due to its steep gradient. This sediment flows into Lake 2.

Alternative designs of the future channel will be influenced by the ultimate development and land uses associated with the future channel and integration with South Suburban's Park as open space lands to the east. Channel sizing could vary between the capacity needed to meet a 100-year flood from the 6200 South Tributary or probable maximum flood event and approval is requested for future channel improvements up to the PMF size channel. Either of the alternatives would require a future channel larger than the proposed immediate channel improvements. The alignment of the future channel could also slightly vary from the proposed immediate channel alignment depending on adjoining land uses.

Future channel improvements would involve the entire length of the 7/11 Gulch from South Platte Canyon road to Lake 2 (Sheet 4). The western portion of the 7/11 Gulch is to be part of Kiewit Western's ongoing mining activities.

Endangered Species Act Compliance: The channel does not provide habitat for any federally listed species. Surveys for the Ute ladies'-tresses orchid *(Spiranthes diluvialis)* and Preble's meadow jumping mouse *(Zapus hudonius preblei)* have been conducted in the area and accepted by the USFWS.

Mitigation of Environmental Effects: The current channel does not support wetlands so there will be no impacts to wetland resources associated with immediate channel improvements. Once established these resources will provide enhanced wildlife habitat for the channel but should not be considered compensatory mitigation since the existing channel is void of such vegetation.

Planting Specifications for Immediate Channel Improvements: The channel will be planted with the following vegetation to produce a diverse cover. The shrub and wetland species are rhizomatous and should, over time, spread from the clumped plantings.

Each clumped shrub planting will contain 10 shrubs of the same species with a spacing of 4-feet to 5-feet between shrubs. The spacing between shrub clumps is about 200 feet (Figure 2). One-gallon container stock will be used. All shrubs will be watered weekly for the first growing season. Shrub plantings can consist of any of the following species; a mix is recommended. Total of 110 shrubs.

Chokecherry *Prunus virginiana*
Wood's rose *Rosa woodsii*
American plum *Prunus americana*
Oakleaf sumac *Rhus trilobata*
Rabbitbrush *Chrysothamnus nauseosus*

Trees: A total of 15 cottonwoods, 1-inch caliper B&B cottonwoods *(Populus deltoides)*, will be planted (Figure 2).

Wetland Plantings: Bulrush transplants (*Scirpus acutus and S. americanus)* will be planted along the sides of the low flow channel at spacings of about 100 feet (Figure 2). Each planting area will contain a 50 percent mix of the two species and a total of 30 plants, planted on 2-foot centers within the grouping along the edge of the low flow channel. Total plantings – 180 plants per species for a total of 360 plants.

Grass Seeding for Channel Sideslopes

Native grass mix for loamy or clayey soils.

Species	Variety	Percent of Mix	Pounds PLS/Acre (Drilled Planting)
Western wheatgrass	Arriba	35	5.6
Green needlegrass	Lodorm	25	2.5
Blue grama	Lovington	25	0.6
Sideoats grama	Vaughn	15	1.35
		100	10.05 lbs/ac.

The Colorado Department of Public Health and Environment, WQCD-GWPS-B2, 4300 Cherry Creek Drive South, Denver, Colorado 80222-1530, will review the proposed project for state certification in accordance with the provisions of Section 401 of the Clean Water Act. The certification, if issued, will express the State's opinion that the operations undertaken by the applicant will not result in a violation of applicable water quality standards. The Colorado Department of Public Health and Environment hereby incorporates this public notice as its own public notice and procedures by reference thereto.

The Colorado Department of Public Health and Environment also reviews each project with respect to the antidegradation provisions in state regulations. For the project that is the subject of this public notice the Colorado Department of Public Health and Environment has preliminarily determined that this project is not located on waters that require an antidegradation review. For further information regarding antidegradation provisions, please contact Mr. John Farrow, telephone (303) 692-3575, at the Colorado Water Quality Control Division.

Pursuant to the Endangered Species Act, the proposed project is being reviewed for impacts to threatened or endangered species and their critical habitat. Our preliminary review indicates there will be no affect, because no such species are known to utilize the project area.

The Omaha District will comply with the National Historic Preservation Act of 1966 and 36 CFR 800. We have checked the National Register of Historic Places and "its current supplements, and no property listed in the Register or proposed for listing is located in the permit area. This is the extent of our knowledge about historic properties in the permit area at this time. However, we will evaluate input by the State Historic Preservation Officer and the public in response to this public notice, and we may conduct or require a reconnaissance survey of the permit area or check for unknown historic properties, if warranted.

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits that reasonably may be expected to accrue from the proposal must be balanced against the reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, wetlands, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the work on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act (40 C.F.R. Part 230).

The Corps of Engineers is soliciting written comments from the public; Federal, state and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Comments, both favorable and unfavorable, will be accepted, made a part of the record and will receive full consideration in subsequent actions on this application. Any agency or individual having an objection to the work should identify it as an objection with clear and specific reasons. All replies to the public notice should be sent to the **U. S. Army Corps of Engineers, Tri-Lakes Project Office, 9307 S. Platte Canyon Road, Littleton, Colorado 80128-6901.** For additional information please contact **Mr. Rex Fletcher** at **(303) 979-4120.**

The District Engineer will consider requests for holding a public hearing, for the purpose of gathering additional information. Before the expiration date of this notice, anyone may request, in writing, that a public hearing be held. Requests for a public hearing should state specifically the reasons for holding a public hearing, and what additional information would be obtained. Should the District Engineer decide that additional information is required and a public hearing should be held, interested parties will be notified of the date, time and location.

Comments received after the close of business on the expiration date of this public notice will not be considered.